## ABSTRACT OF THE DISCLOSURE

The present invention relates to a process for producing a modified polymer, comprising modifying a polymer having an active site of an organometal type in a molecule by reacting the site thereof with a hydrocarbyloxysilane compound and adding a condensation accelerator to the reaction system in the middle of the above reaction and/or after completion thereof and a rubber composition comprising the modified polymer obtained by the process described above, preferably a rubber composition comprising 100 parts by weight of (A) a rubber component containing at least 30 % by weight of the above modified polymer and 10 to 100 parts by weight of (B) silica and/or carbon black.

According to the present invention, capable of being provided is a silica and/or carbon black-blended rubber composition which enhances interaction with silica and carbon black and which elevates the fracture characteristic, the abrasion resistance and the low heat buildup property and can exhibit a good workability.